Integrative Medicine for the New Century: A U.S. Perspective

Chinese University of Hong Kong Seminar September 10th, 2015

Ka-Kit Hui, M.D., F.A.C.P.

Wallis Annenberg Chair in Integrative East-West Medicine Professor, Founder & Director Center For East-West Medicine Department of Medicine Chair, Collaborative Centers for Integrative Medicine UCLA

www.cewm.med.ucla.edu





My Journey in Improving Global Healthcare through Integrative Medicine

1992, San Francisco: Before launching CEWM, presented at a meeting the need for an integrative East-West clinical model

1997, Beijing: 1st World Congress, warned about the looming healthcare crisis and alluded to IM's potential

1999, Macao, 1999 Beijing. 2000, Japan: WHO meetings, discussed the potential impact of integrative East-West medicine on the current global healthcare crisis

2002, Beijing: 2nd World Congress, emphasized the importance of collaboration among the IM workforce

2007, Guangzhou: 3rd World Congress, delineated the need and plan for improving global collaboration in IM thru better communication

2008, Sydney, 2011, Shanghai; 2012, Beijing, Tianjin:

International conferences, launching and disseminating an integrative East-West patient- and society-centered model of healthcare that is safe and cost-effective

2013, Shanghai, 2014, Taiwan; 2015, Korea: WHO meeting, discussed innovative approaches in TCM and IM evidence-based research and the role of IM in global health systems, respectively.

2010







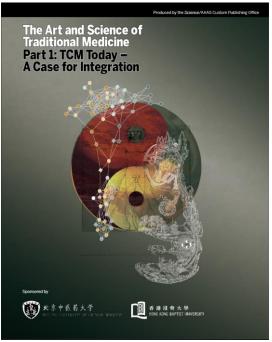
"The two systems of traditional and Western medicine need not clash. Within the context of primary health care, they can blend together in beneficial harmony, taking advantage of the best features of each system and compensating for certain weaknesses in each as well."

-Margaret Chan

Director General of WHO







七十年代西方掀起的針灸熱的起源



The New York Times

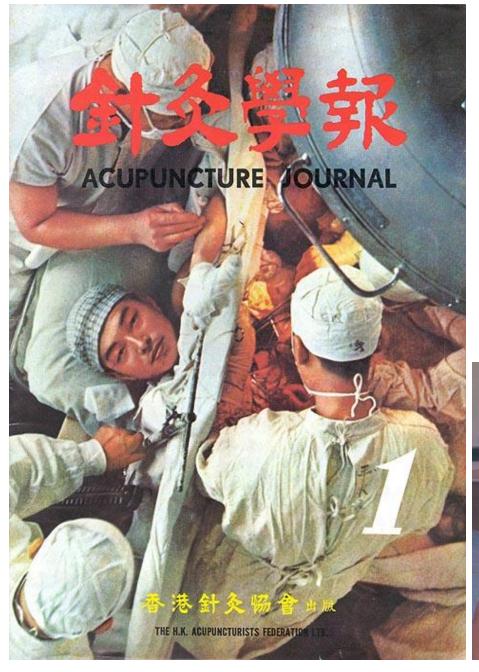
Monday, July 26, 1971 Now, Let Me Tell You About My Appendectomy in Peking... by James Reston, Editor

現在,讓我告訴你關於我在北京的腹腔鏡闌尾切除術..... by James Reston, Editor





1971年七月《紐約時報》著名記者詹姆斯·賴斯頓撰寫的一篇介紹他在北京接受針灸治療的文章,這是針灸傳入美國的歷史性標誌。它標誌著中國大陸的現代針灸正式傳入美國,並成為美國和許多西方國家的主流針灸學派



1971

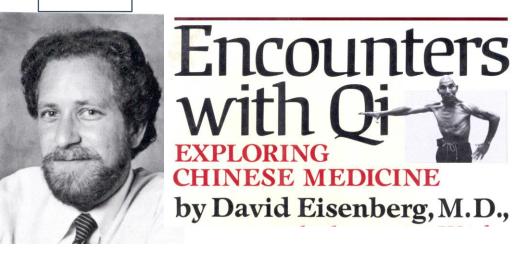


My Student Years
At UCLA, 1972





1980s



"My special thanks to Dr. K. Kit Hui, internist, clinical pharmacologist, and scholar of Chinese medicine, for teaching me so much about the integration of Chinese and Western medical practice."

-- David Eisenberg, MD

1993



HOME

ARTICLES *

ISSUES *

SPECIALTIES & TOPICS ~

FOR AUTHORS »



SPECIAL ARTICLE

Unconventional Medicine in the United States -- Prevalence. Costs, and Patterns of Use

David M. Eisenberg, Ronald C. Kessler, Cindy Foster, Frances E. Norlock, David R. Calkins, and Thomas L. Delbanco N Engl J Med 1993; 328:246-252 January 28, 1993

2011





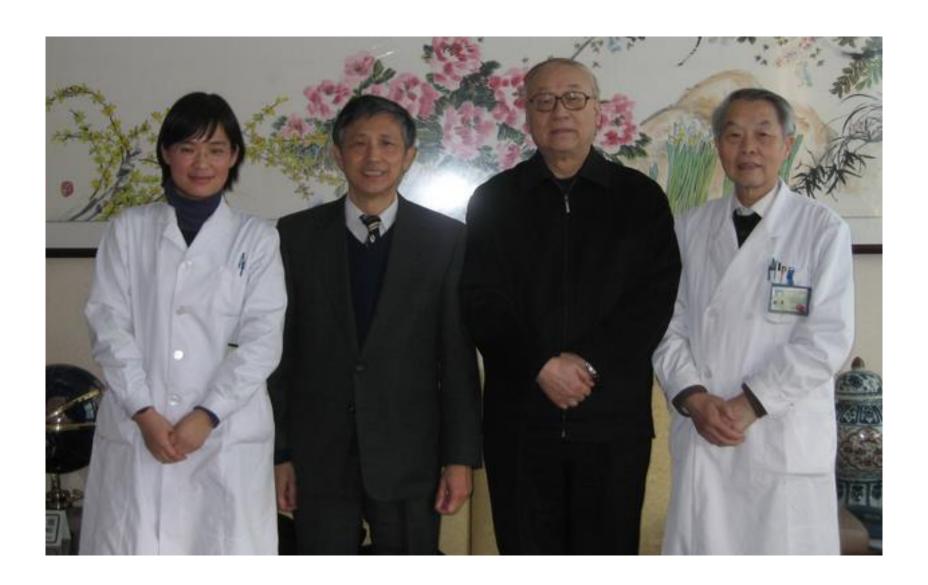












2011 Albert Lasker Medical Research Awards

THE 2011

LASKER MEDICAL RESEARCH AWARDS

The discovery of artemisinin (qinghaosu) and gifts from Chinese medicine

Youyou Tu



Dr. Tu Youyou at 2011 Lasker Awards ceremony, with Maria C. Freire, Lasker Foundation President (left) and Alfred Sommer, MHS Lasker Foundation Chairman (right). Photo: @Stephanie Badini



Dr. Tu Youyou became the first Chinese woman to accept the Lasker Prize for her lifelong malaria research in 2011.

2011年拉斯克獎日前揭曉,中國科學家屠呦呦獲得其中的臨床醫學獎。獲獎理由是"因為發現青蒿素——一種用於治療瘧疾的藥物,挽救了全球特別是發展中國家的數百萬人的生命。"



Video



Mining Ancient Chinese Herbs for Cutting-Edge Therapies by Dr. Yung Chi Tommy Cheng, Yale University

Dr. Yung Chi Tommy Cheng shares his insights on searching for innovative therapies from ancient Chinese herbs at UCLA.

On October 3rd, 2012, Dr. Yung Chi (Tommy) Cheng, Henry Bronson Professor of Pharmacology at Yale University School of Medicine and the former Program Director of Yale Comprehensive Cancer Center, presented "Mining Ancient Chinese Herbs for Cutting-Edge Therapies" at UCLA. He shared his insights on searching for innovative therapies from ancient Chinese herbs.



Professor Cheng is internationally renowned for his significant role in the advancement of pharmacology and exceptional contributions to herbal medicine research. He also founded PhytoCeutica, Inc., a biotech company specializing in the development of traditional Chinese medicine and FDA-approved prescription drugs for the treatment of cancer, and co-founded Achillion Pharmaceuticals, a company striving to further improve the existing antiviral compounds for the treatment of HIV/AIDS and hepatitis B. His extensive training and background in pharmacology has led him to the invention of multiple drugs that are routinely used for the treatment of cancer, hepatitis B, and HIV/AIDS—relieving the suffering of millions of people.



Work done by **Yung Chi (Tommy) Cheng**, PhD.

- Henry Bronson Professor of Pharmacology, Yale University School of Medicine
- Chairman of the Consortium for Globalization of Chinese Medicine



Source:

http://exploreim.ucla.edu/video/miningancient-chinese-herbs-for-cutting-edgetherapies-by-dr-yung-chi-tommy-cheng-yaleuniversity/

建立結合醫學中心之前的學術研究論文(部分)

- Beta-endorphin: Intravenous infusion causes behavioral change in psychiatric inpatients. *Arch Gen Psychiat* 1980.
- Increased numbers of beta receptors in orthostatic hypotension due to autonomic dysfunction. *NEJM* 1981.
- The effects of tetramethylpyrazine on the human platelet alpha₂ adrenergic receptor adenylate cyclase system. Research Comm. Chemical Pathology & *Pharmacology* 58(1):3-14, 1987.
- The effects of protein kinase inhibitor 1-(5-isoquinolinylsufonyl)-2-methylpiperazine on B2 adrenergic receptor activation and desensitization in intact human lymphocytes. *J Pharmacol Exp Ther* 1989.
- Pharmacokinetics of fosinopril in patients with various degrees of renal function. Clin Phar Ther 1991.
- Interaction of berberine with human platelet a₂ adrenoceptors. *Life Sciences* 49:315-324, 1991

Integrating Traditional Chinese Medicine with Modern Western Medicine

"From the vantage point of a clinical investigator and clinician with board certification in Internal Medicine, Geriatrics, and Clinical Pharmacology, as well as a working knowledge of Traditional Chinese Medicine (TCM), the author will discuss the importance of the integration of TCM with Modern Western Medicine (MWM). A comparison will be drawn between the two systems of healing in terms of their theoretical foundation, and unique characteristics, in addition to the diagnostic and therapeutic approaches to health and disease. Using clinical examples, the complementarity of TCM and MWM will be shown in balancing their respective strengths and weaknesses. Successful integration of the two systems could contribute significantly to advances in medicine around the world. By maximizing their combined potential, difficult clinical problems could be solved while promoting more affordable health care. Before this will be possible, however, thorough basic and clinical research will be required. In predominantly Chinese and Asian communities, the importance of synthesizing TCM and MWM in the near future is particularly relevant. Without expert medical guidance, the preference to self-medicate or to combine the two systems inappropriately could lead to harmful medical outcomes."

結合醫學相關的學術研究所發表論文2002-2009

- •Acupuncture Inhibits Sympathetic Activation During Mental Stress in Advanced Heart Failure Patients. *Journal of Cardiac Failure* 2002
- •Evaluating the statistical significance of health-related quality-of-life change in individual patients," *Eval Health Prof.* 2005
- •The potential of a person-centered approach in caring for patients with cancer: a perspective from the UCLA center for East-west medicine. *Integr Cancer Ther* 2006
- •Terminology standardization in Chinese medicine: the perspective from UCLA center for East-West medicine. *Chin J Integr Med* 2007
- •Randomized Controlled Trial of Tai Chi for Tension Headaches. Evid Based Complement Alternat Med 2007

結合醫學相關的學術研究所發表論文 2010s

- Better Research and Personnel Training is the Main Strategy for TCM Globalization —a Perspective from the U.S.. *Chinese Journal of Integrative Medicine*. 2010
- Medical Student Attitudes toward Complementary and Alternative and Integrative Medicine. *Evidence-Based Complementary and Alternative Medicine*. 2011
- Hui KK, Zhang WJ. China is Poised to Build a Better Health Care Delivery System through Integrative East-West Medical Paradigm. Chinese Journal of Integrative Medicine. 2011 Jan;31(1):107-10.
- Zhao J, Cao HX, Hui KK. The Effect and Impact of Whole Systems Research and Comparative Effectiveness Research on the Clinical Study of Traditional Chinese Medicine. Chinese Journal of Integrative Medicine Traditional and Western Medicine. 2011 Sept; 31(9): 1157-1160.
- Building an evidence-base for TCM and integrative East-West medicine: A review of recent developments in innovative research design. *Journal of Traditional and Complementary Medicine*. 2012
- Person-Centered Medicine at the Intersection of East and West. EJPCM. 2013

結合醫學相關的學術研究所發表論文 2010s

- Abbott, RB, Hui KK. Effect of Perineal Self-Acupressure on Constipation: A Randomized, Clinical Trial. Journal of General Internal Medicine. 2014 Nov; 30(4):434-9.
- Pritzker SE, Hui KK. Introducing Considerations in the Translation of Chinese Medicine. J Integr Med. 2014; 12(4): 394-396.
- Zhang WJ, Pritzker SE, and Hui KK. Factors Affecting Definitions of and Approaches to Integrative Medicine: A Mixed Methods Study Examining China's Integrative Medicine Development. Evidence-Based Complementary and Alternative Medicine, vol. 2015, Article ID 458765, 12 pages, 2015. doi:10.1155/2015/458765.
- Zhang WJ, Hui KK. Clinical practice of integrative medicine in the United States and its application in primary care. *Chin J Integr Trad West Med.* 2015, 35(4): 391-397.

UCLA Center for East-West Medicine

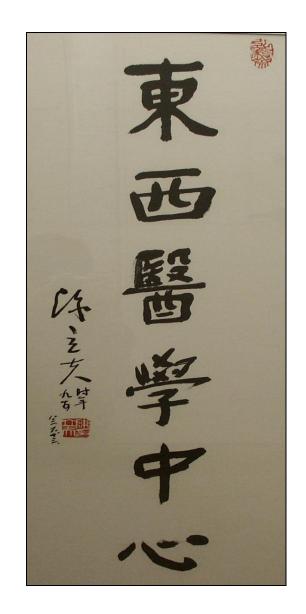
Mission (宗旨):

Lead in improving health & quality of life by bringing together the best of Western and Chinese healing traditions to provide healthcare that is safe, effective, affordable, and accessible for people, families, and communities. (1993)

致力於結合當代最前沿的西醫和傳統中醫的臨床和 科研成就;

針對個人,家庭和社會提供<u>有效</u>,安全,可及和價 廉的醫療服務;

http://www.cewm.med.ucla.edu



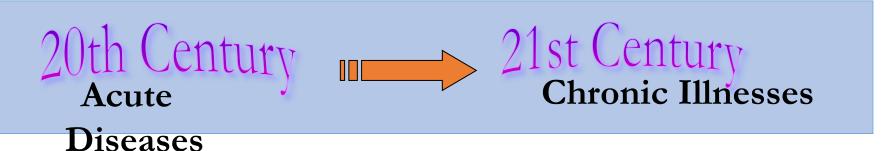
Sherman Mellinkoff, MD Dean Emeritus, UCLA School of Medicine

Dear Kit,

Your proposal for an expanded UCLA Center for East-West Medicine strikes me as an inspiring plan. Its implementation could be of great value in medical education, medical research, cost-effective and compassionate care of patients, prevention of illness, and synergistic application of principles originating in **Eastern and Western civilizations.** The beacon you have already ignited at UCLA could through this Center grow in luster to the benefit of all mankind.



Trend in Medicine



Biomedicine
Hospital-Based
Acute &
Advanced Stage
Crisis Care



Prevention, Wellness & Self Care



Clinic-Based
Community
Primary Care

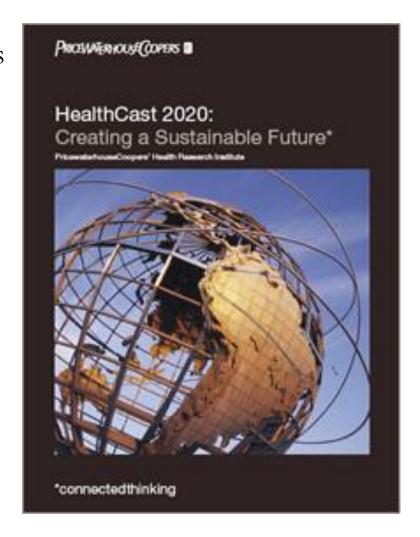
U.S. Healthcare System – in critical condition

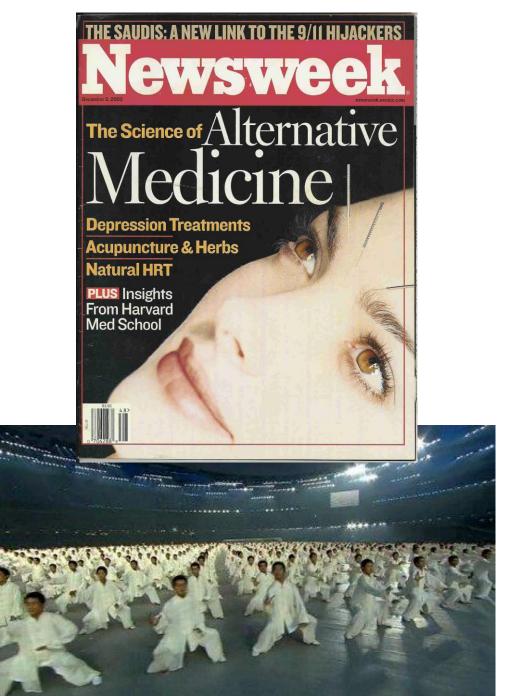
PwC HealthCast 2020:

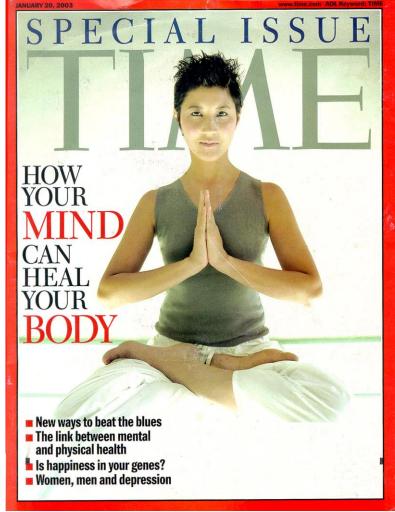
Creating a Sustainable Future

- The current health systems of nations around the world will be **unsustainable if unchanged** over the next 15 years.
- Increasing demand, rising costs, and uneven quality, misaligned incentives overwhelm health systems, creating massive financial burdens for individual countries and devastating health problems for the individuals who live in them.

Published 2005







ACIHM (formerly CAHCIM) 60+ Academic Health Centers

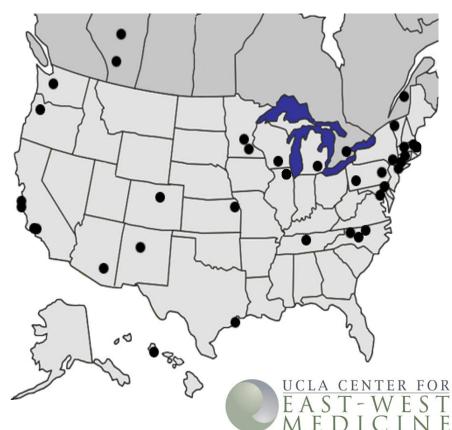


Academic Consortium for Integrative Health and Medicine

Mission: to advance the principles and practices of integrative healthcare within academic institutions.

Integrative Medicine is...

- the practice of medicine that reaffirms the importance of the relationship between practitioner and patient, focuses on the <u>whole person</u>.
- informed by evidence, and makes use of all appropriate therapeutic approaches, healthcare professionals and disciplines to achieve optimal health and healing.



UCLA COLLABORATIVE CENTERS for Integrative Medicine



UCLA CCIM is a UCLA system-wide program committed to the study and application of integrative medicine

Center for East-West Medicine

Ka-Kit Hui, MD, FACP (Chair)

Center for Excellence in Pancreatic Diseases

Vay Liang W. (Bill) Go, MD

Center for Human Nutrition

David Heber, MD, PhD

Center for Neurobiology of Stress

Emeran Mayer, MD

Bruce D. Naliboff, PhD

Cousins Center for Psychoneuroimmunology

Michael Irwin, MD

e-CAM

Edwin L. Cooper, PhD, ScD

Doctoring Program, UCLA School of Medicine

Margaret L. Stuber, MD

Mindful Awareness Research Center (MARC)

Susan Smalley, MD

Pediatric Pain Program

Lonnie K. Zeltzer, MD

School of Public Health

Michael Goldstein, PhD

RAND/Samueli Institute

Ian Coulter, PhD

Simms/Mann Center for Integrative Oncology

Anne Coscarelli, PhD

Mary Hardy, MD

Stiles Program in Integrative Oncology

Richard Pietras, MD, PhD

UCLArts and Healing

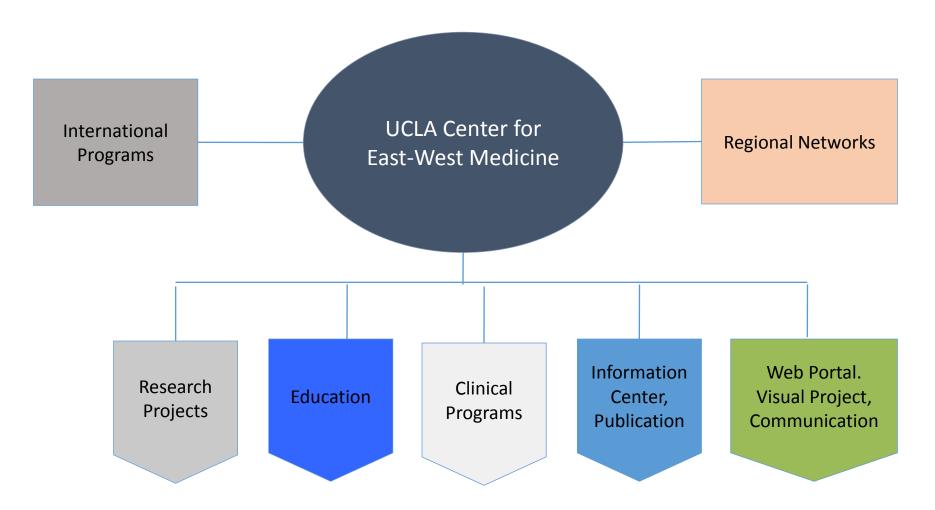
Ping Ho, MA, MPH

UCLA CCIM Webpage:

www.ccim.med.ucla.edu

Zhang WJ, Su D, <u>Hui KK.</u> The development and current status of integrative medicine at UCLA. Journal of Chinese Integrative Medicine. 2012 Sept; 10(9).

The Center



Integrative Medicine

- Patient-centered care (individualized)
- Holistic approach
- Utilizes all appropriate therapeutic modalities (conventional and non-conventional)
- Leverages body's ability to heal itself through self-care
- Emphasizes prevention and wellness
- Informed by evidence
- Varied in its practice

Clinical models in Integrative Medicine



An International Buffet

VS



Gourmet Dish

UCLA CEWM Clinic

An example of an Integrative Medicine Clinical Model

UCLA Health System Center for East West Medicine

Clinic Staff

- Seven board-certified physicians trained in E-W medicine
- Seven licensed acupuncturists & massage therapist who were also trained in E-W medicine

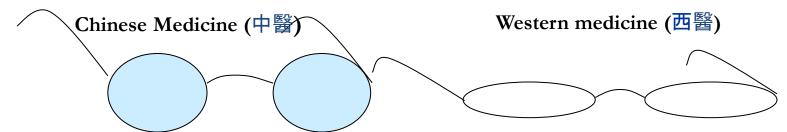
Patient referral

- About 18,000 patient visits a year
- Primarily referred from >500 specialists in the UCLA system

Patient population

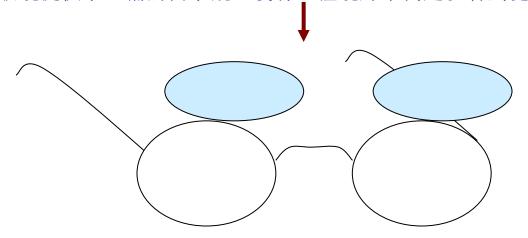
- Most patients exhaust conventional treatments
- Patients who fail or are intolerant of medications/surgery
- Patients seek individualized care for wellness & prevention and treatment of chronic conditions

UCLA Integrative East-West Medicine Clinical Model (東西結合醫學模型)



"Flip" shades provide a complementary view of medicine. Neither lens by itself is sufficient to see all aspects of the spectrum of health.

翻版鏡提供了互補的醫學觀。沒有一種鏡片單獨足以看到健康的全部面貌



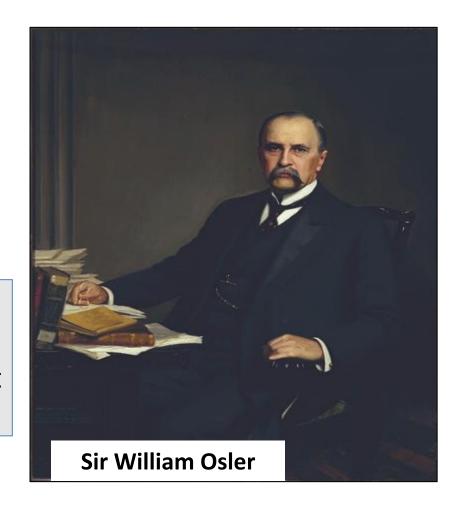
Combining components of Western Medicine and Traditional Chinese Medicine together to benefit patients.

結合中醫和西醫的成分, 造福患者

The study of medicine

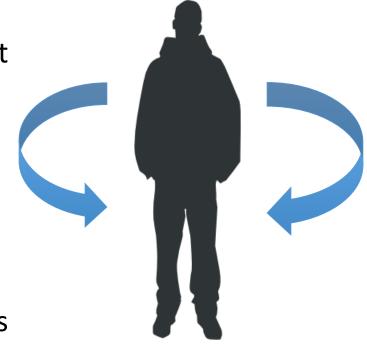
"begins with the <u>patient</u>, continues with the <u>patient</u>, and ends with the <u>patient</u>"

"It is much more important to know what sort of a <u>patient</u> has a disease than what sort of a disease a patient has."



Whole Person Approach

- Assess adequacy of prior conventional work up and treatment
- Complete health history including childhood experiences, work, psychosocial, trauma, nutritional, and other lifestyle factors
- Conventional physical exam supplemented by palpation of acupoints and TCM tongue diagnosis



Education & Treatments

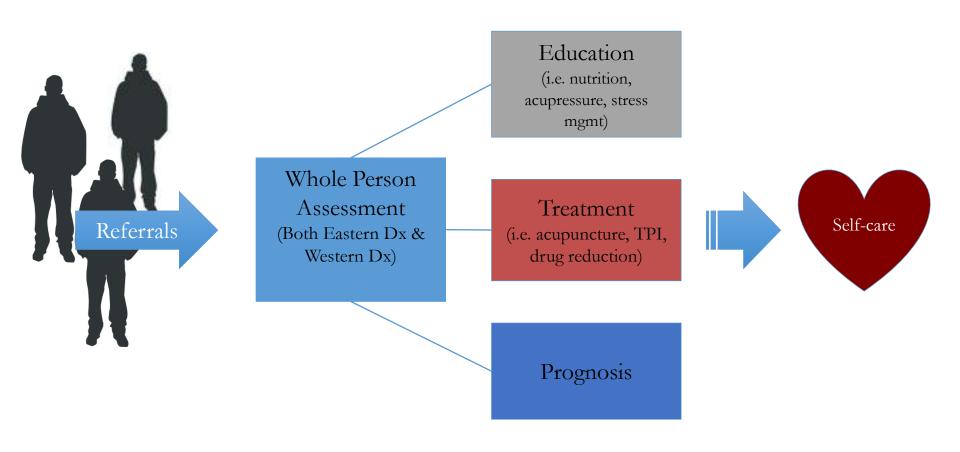
Education

- Importance of balance and how lack of it leads to depletion
- Life style modifications
- Exercise/Sleep/Nutritional advice
- Self-massage & Acupressure
- Stress management

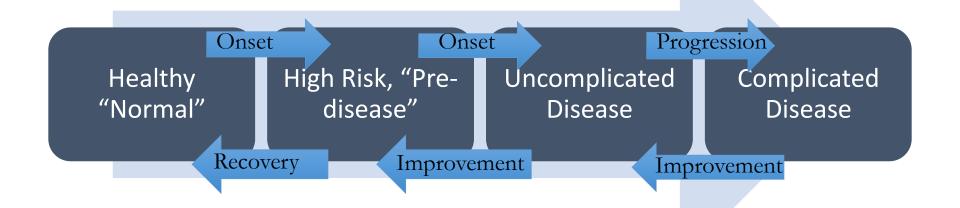
Treatments

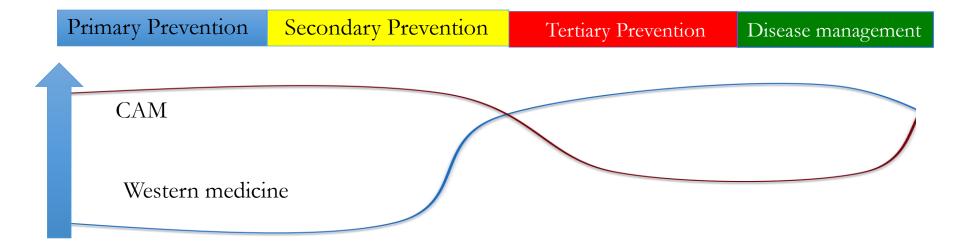
- Acupuncture
- Acupressure and massage therapy
- Trigger Point Injections (TPI)
- Adjustment of medications

CEWM Clinical Model



Continuum of Prevention





Integrative Medicine in China vs. US

Different Workforce

China

- Pioneers: doctors of western medicine learning Chinese medicine
- Currently, mostly graduates from TCM universities with knowledge of western medicine

The United States (West)

- Mostly led by MDs
- Pushed by customers
- Joined by other health professionals, such as nurse practitioners, public health practitioners, dietitians, et al.

Disease Care

Health Care

有趣的創新方法

Building Evidence-Base for TCM and Integrative East-West Medicine

- 以病人為中心的結果研究 Patient-Centered Outcomes Research (PCOR)
- 比較療效研究 Comparative Effectiveness Research (CER)
- 整體系統研究 Whole Systems Research (WSR)
- 健康服務研究 Health Services Research (HSR)
- 定性研究 Qualitative Research
- 多種方法相結合的研究 Mixed Methods Research

Each expands upon conventional approaches to clinical research and can also be combined with clinical trial data to yield a mixed-methods approach.



"Although Evidence-Based Medicine (EBM) offers a seemingly ideal solution for the complex decision-making process in contemporary medicine, conclusions regarding it's practical use continue to be debated. Critics have highlighted, for example, the tendency to devalue evidence based on clinical experience in most EBM discourse, which favors knowledge based solely in research evidence, primarily the randomized clinical trial (RCT). (...) Regardless of these limitations, EBM is here to stay, and researchers in both TCM and IM must take the call to establish an evidence base for clinical decision making quite seriously."

"Some innovative strategies for RCT design in TCM and IM draw upon the notion of "Whole Systems Research" or WSR. WSR studies attempt to measure the effectiveness of whole medical systems such as Ayurveda or Chinese medicine as they are practiced in real life. Here, the term "effectiveness" points to a comprehensive, more personcentered notion that the traditional notion of "efficacy." Whereas efficacy usually emphasizes the effect of one treatment agent on a single outcome measure, effectiveness looks at the effects of a treatment or set of treatments on a whole range of outcome measures."

"From our perspective, it is imperative that researchers in China, Hong Kong, and Taiwan, where there is extensive IM infrastructure already available for research, play a role in the development of such innovative approaches to the evaluation of TCM and IM."

Pritzker SE, Hui KK. "Building an evidence-base for TCM and integrative East-West medicine: A review of recent developments in innovative research design." Journal of Traditional and Complementary Medicine. Vol. 2, No. 3, pp. 158-163.

推廣 Dissemination

- 醫師培訓
 Educating physicians
 - 培訓醫生充分認識傳統研究方法在中醫學與結合醫學中的挑戰

Educating physicians about the challenges of conventional research methodologies in investigating TCM and IM

使醫生瞭解中醫學與結合醫學在研究方法創新時要具備 嚴格和系統的本質

Educating physicians about the rigor and systematic nature of innovative research methods for TCM and IM

• 將中文研究結果進行翻譯
Translating appropriately conducted research results from Chinese.

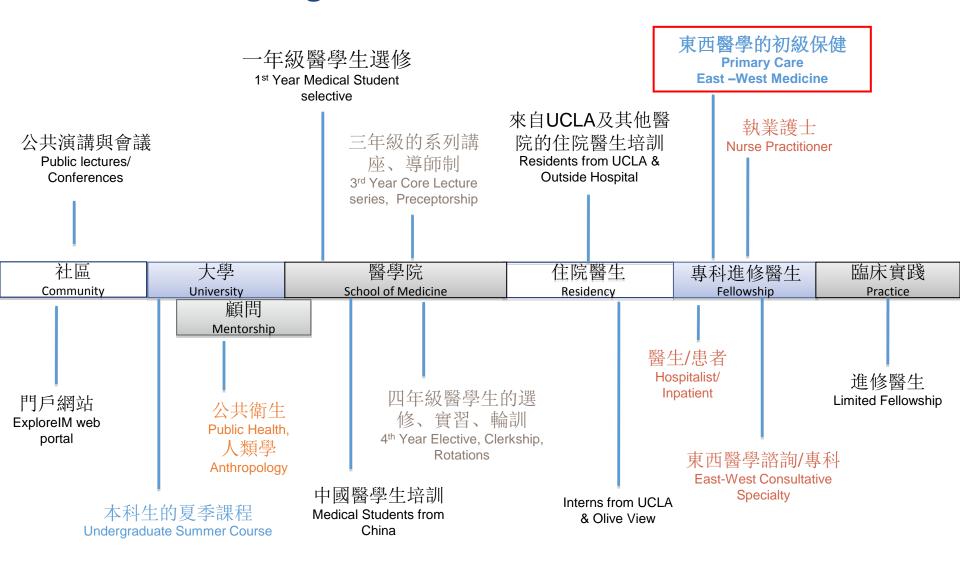
• 患者培訓

Educating patients

- 將科研性的中英文研究結果進行轉化 Translating and framing research results from scientific English as well as Chinese.
- 為患者提供基於證據的資源以供他們開展自己的研究 Creating evidence-based resources for patients to educate themselves.



UCLA的結合醫學教育 Education in Integrative Medicine at UCLA





Clinical

Education

Research

Integrative Health

S Public

Health
Professionals/
Providers
Clinicians
Health educators
Information
Others

Government/
Non-Profit
Policy Makers
Health Regulators

Business
Health Care Orgs
Herbs
Drug
Equipment
Information
Others

Patients
Family
Work environment
Community
Others

Effective

Affordable

Safe

Accessible

MEETING PUBLIC/PATIENT HEALTH NEEDS

Exclusive Interview of Dr. Ka-Kit Hui on Integrative Medicine at Stanford University



"There is this notion that [integrative medicine] is outside of our mainstream biomedical model and that there is not enough time to even teach what we need to teach. But really it depends on how we define good medicine." Exclusive interview done by the Center of Excellence at Stanford University with Pfeiffer Visiting Scholar, Ka-Kit Hui, MD, FACP.

<u>Video Link</u>: <u>http://youtu.be/W7vOGYTbpVk</u>,

http://exploreim.ucla.edu/health-care/exclusive-interview-of-dr-ka-kit-hui-on-integrative-medicine-at-stanforduniversity/

Dreams for a Building a Better Global Health Model

- ◆Develop an **optimal healing environment** to improve the behavioral, social, spiritual, environmental, and nutritional factors are included in the care and delivery process
- ◆Reaffirms the importance of **the relationship between practitioner and patient** based on trust and respect, as well as the importance of not only technical competence but also compassion
- ◆ Redistribute resources and provide right incentives to shift from high tech, invasive, crisis intervention to low tech, low cost, prevention and early disease recognition
- ◆Seamless integration across health professionals of **different healing traditions**, **caregivers, and institutions**
- ◆Effective, evidence-based, safe, but is also cost-efficient
- ◆Flexible enough to meet the needs of different individuals and societies

中国有可能建立更完善的卫生保健实施系统——中西医结合实施系统

许家杰 张卫军

摘要 中美两国的医疗改革均以扩大医药保障体系,达到更广泛的覆盖率以及降低医药服务的成本和提高医疗服务的质量和效率为目标。尽管国情不同,但两国医疗改革的具体措施可以相互借鉴。本文从当前美国医疗系统的两大弊端——失败的慢性病系统管理和效率低下的初级卫生保健系统入手,讨论美国医疗改革中采取的解决方案以及结合医学在医疗改革中所能起到的作用;根据我们对双方医疗系统和结合医学的了解,结合中国目前医疗改革中中医参与的相关措施,认为如果这些措施能确切实行,有效借鉴部分美国医疗改革中采取的措施,加上中国中西医结合的固有特色,中国的医疗系统可能成为更完善的医疗实施系统。

关键词 医疗改革;医疗费用;慢性病管理;初级卫生保健;结合医学

China Is Poised to Build a Better Healthcare Delivery System Using the Integrative Health Paradigm Ka Kit HUI and ZHANG Wei-jun Center for East-West Medicine at University of California at Los Angeles, Los Angeles (90024)

ABSTRACT China and the United States share similar goals regarding their health care reform; expanding coverage, bending the curve of healthcare expenditure, and ensuring quality improvement and effectiveness of healthcare. Though many differences in the two health care systems exist, there are still many innovative strategies both countries can learn from each other. This paper first discusses two major problems in the America's health care system; an increasing aging population coupled with ineffective chronic disease management; and a failing primary care system. Next it discusses the role of integrative medicine in the United States health care reform. We also review some key strategies in China's health care reform, which we believe if these policies are implemented fully and effectively, China is poised to build a better healthcare delivery system using the integrative health paradigm.

KEYWORDS health care reform; healthcare expenditure; chronic disease management; primary care; integrative medicine

Shanghai International Integrative Medicine Congress



April 22-24, 2011

Theme: New Life, New Medicine

Presented the following talk:

The Important Role of Integrative Medicine in Health Care Reform

Emphasizing the importance of the integrative health paradigm in revitalizing primary care through health system redesign and training of a new group of clinicians with enhanced ability to solve most problems encountered in the out-patient and community settings by utilizing the best of different healing

traditions.

2013- NOW

Teaching IM to 12,000 community-based clinicians/public health workers in Shanghai

Thank you!

電話: +1 310-794-0712

郵箱: cewm@mednet.ucla.edu

網站: <u>www.cewm.med.ucla.edu</u>

http://exploreim.ucla.edu



